PROGRAMMATIC AGREEMENT BETWEEN

THE BUREAU OF LAND MANAGEMENT AND THE WYOMING STATE HISTORIC PRESERVATION OFFICER REGARDING MITIGATION OF ADVERSE EFFECTS TO THE PUMPKIN BUTTES TRADITIONAL CULTURAL PROPERTY FROM ANTICIPATED FEDERAL MINERALS DEVELOPMENT CAMPBELL COUNTY, WYOMING

WHEREAS, Federal oil and gas leaseholders have submitted numerous applications to drill oil and gas wells and construct infrastructure corridors, access roads and associated facilities on federally owned subsurface minerals overlain by private surface lands in the vicinity of the Pumpkin Buttes Traditional Cultural Property; and

WHEREAS, Federal uranium leaseholders will submit plans of operation to construct in-situ uranium wells, infrastructure corridors, access roads and associated facilities on federally owned subsurface minerals overlain by private surface lands in the vicinity of the Pumpkin Buttes Traditional Cultural Property; and

WHEREAS, the BLM has determined that the development of oil, gas and in-situ uranium wells, infrastructure corridors, access roads and other facilities are assumed to have an adverse effect to the contributing integrity of setting, feeling and association for the Pumpkin Buttes Traditional Cultural Property determined eligible for listing in the National Register of Historic Places under Criteria "a" and "b" where the full extent of that disturbance is not known; and

WHEREAS, the BLM has consulted with the Wyoming State Historic Preservation Officer (SHPO) pursuant to the State Protocol between the Wyoming BLM State Director and the Wyoming State Historic Preservation Officer; and

WHEREAS, this undertaking does not meet thresholds for review by the Advisory Council on Historic Preservation identified in the *Programmatic Agreement Among the Bureau of Land Management, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers Regarding the Manner in which BLM Will Meet its Responsibilities Under the National Historic Preservation Act* (1997) "Hereinafter "National Programmatic Agreement"; and

WHEREAS, the BLM invited the Blackfeet, Cheyenne River Sioux, Crow, Eastern Shoshone, Fort Peck, Mandan, Hidatsa and Arikara Nation, Northern Arapaho, Northern Cheyenne and Oglala tribes to participate in consultation and to be consulting parties for the resolution of adverse effects to the Pumpkin Buttes, but the tribes chose not to officially comment on this agreement; and

WHEREAS, the National Programmatic Agreement, STATE PROTOCOL Between the Wyoming BLM State Director and the Wyoming State Historic Preservation Officer (hereinafter "State Protocol"), executed on March 8, 2006, is incorporated herein by reference; and

WHEREAS, the State of Wyoming and the SHPO do not waive their sovereign immunity by entering into this PA, and each fully retains all immunities and defenses provided by law with respect to any action based on or occurring as a result of this PA;

WHEREAS, there are existing Memoranda of Agreement resolving adverse effects to the Pumpkin Buttes TCP from the Dry Willow I POD and the Savageton 3 and 4 POD, and these agreements will not be altered upon the signature of this document;

NOW, THEREFORE, BLM and SHPO agree that construction of all energy development related federal undertakings within two miles of the Pumpkin Buttes Traditional Cultural Property shall be implemented in accordance with the following stipulations in order to take into account the effects these projects will have on the Pumpkin Buttes Traditional Cultural Property.

STIPULATIONS

The BLM shall ensure that the following mitigation measures are implemented:

I. Discoveries

- A. If any cultural materials are discovered during construction, work in the area shall halt immediately, the BLM must be contacted, and the materials evaluated by a BLM-permitted archaeologist. Work may not resume until authorized by the BLM.
- B. If Native American human remains, funerary objects, sacred objects, or objects of cultural patrimony are encountered as a result of a BLM undertaking on BLM surface, the BLM will comply with Section 3 of the Native American Graves Protection and Repatriation ACT (NAGPRA) and its implementing regulations at 43 CFR Part 10. If Native American human remains, funerary objects, sacred objects, or objects of cultural patrimony are encountered as a result of a BLM undertaking on private surface, the remains will be evaluated as a historic property and procedures outlined in the State Protocol relating to identification and effect will be followed. Existing state and local laws will be followed pertaining to the discovery of Native American human remains, funerary objects, sacred objects, or objects of cultural patrimony on private surface. The Powder River Basin Oil and Gas Project Final Environmental Impact Statement Standard Condition of Approval (General)(A)(1) regarding accidental discovery will apply to any coalbed methane POD related undertaking.

II. Inadvertent Effects

All operators who are issued energy related permits under this PA will instruct all employees, contractors, subcontractors and any additional parties involved with on the ground operations of their projects to avoid the Pumpkin Buttes TCP. A condition of approval will be written for each POD that will specifically instruct the operator to avoid the TCP.

III. Site Specific Mitigation

A. Mitigation measures that a project submitted to BFO by energy related permit applicants must adhere to in order to operate under this PA are located in the Appendices portion of this document. If the applicant can design their project to meet the mitigations and COA's described in this PA, full consultation between the BLM, SHPO, and tribes will not be necessary. BLM will notify the SHPO and tribes that the project meets the requirements of this PA before BLM issuance of the federal minerals development related permit. If the project cannot be modified to meet the mitigation measures outlined in this agreement, BLM will consult with the SHPO as outlined in the State Protocol.

B. No development will occur on the tops or side of the buttes. The Pumpkin Buttes' tops and bases are defined as follows, based on 1:24,000 USGS Topographic Quadrangles for the area:

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North Butte: top = 6,020 foot contour line, base = 5,280 North Middle Butte: top = 6,000 foot contour line, base = 5,500 South Middle and Indian Buttes: top = 5,920 foot contour line, base = 5,500 South Butte: top = 5,960 foot contour line, base = 5,580

- C. For all activities associated with any future project modification of the federal undertaking, the operator must obtain authorization from the BLM before ground disturbance can take place. The operator and the BLM may implement measures to reduce the visual contrast for any changes to the project. If the project cannot be modified to meet the mitigation measures outlined in this agreement, BLM will consult with the SHPO as outlined in the State Protocol.
- D. Prior to the BLM authorization of additional construction activities, the operator will:
 - 1. Perform a Class III cultural resource inventory, biological, and/or other inventory, as required;
 - 2. Submit detailed construction plans including site-specific applications (as in a Plan of Development); and
 - 3. Participate in an on-site evaluation.
- E. Management practices for the operator will adhere to all conditions included with the leases in addition to all federal and state laws and regulations. According to BLM IM No. 2004-194, best management practices shall be considered in nearly all circumstances. Mitigation measures incorporating standard measures to reduce visual contrast are included in the appendices.

IV. Dispute Resolution

- A. If there is an objection by any Signatory to the manner in which the terms of this PA are implemented, the objecting Signatory will notify the Field Manager in writing of the objection. The Field Manager will notify all other Signatories of the objection. All Signatories will consult to resolve the objection.
- B. Resolution of the objection will be documented in a written amendment to this PA to be signed by all Signatories. If a Signatory fails to respond within 30 days of receipt of the written amendment, concurrence with the amendment will be assumed by other Signatories and the amendment will go into effect. If resolution of the objection does not require amendment to the PA, this decision will be documented in writing and provided to all Signatories.
- C. If the objection cannot be resolved among the Signatories, the matter shall be referred to the BLM State Director. The BLM State Director may consult with the BLM Preservation Board on the matter. The BLM State Director will notify all Signatories and Concurring Parties of the recommendations of the BLM Preservation Board. Within 15 days of notification, any Signatory may request consultation among all Signatories regarding the recommendations of the BLM Preservation Board. The final decision for resolution of the objection by any Signatory shall be made by the BLM State Director.
- D. The BLM Field Manager shall consider non-signatory objections to the manner in which the terms of the PA are implemented. If the objection cannot be resolved to the satisfaction of the BLM and the objecting party, the BLM Field Manager shall request the Signatories to provide their opinion on the matter. Prior to making a final decision on the matter, the BLM Field Manager shall take into account all the Signatory opinions received within 15 days of the request.

F. Nothing in this Section shall be construed or interpreted as a waiver of any judicial remedy that would be available to any party to this PA.

V. Amendment

Any Signatory to this agreement may request that the other Signatories consider amending it if circumstances change over time and/or warrant revision of this PA. Except in the case of amendments addressing resolution of disputes pursuant to Section IV of this PA, amendments shall be executed in writing and shall be signed by all signatories in the same manner as the original PA.

VI. Annual Report and Review

- A. In concurrence with the annual State Protocol report, the Buffalo Field Office shall prepare and provide an annual report detailing how the applicable terms of the PA are being implemented. The report will include an assessment of the effectiveness of reclamation practices described in Appendix A of this PA. The report will also suggest additional work that may be needed in order to better meet reclamation goals.
- B. The Buffalo Field Office shall provide a copy of the annual report to all signatories to this PA. The Buffalo Field Office will also provide to all signatories the opportunity to provide comment on the annual report.

VII. Termination

- A. Any Signatory to this PA may initiate termination by providing written notice to the other parties of their intent. After notification by the initiating Signatory, the remaining Signatories shall have 60 business days to consult to seek agreement on amendments or any other actions that would address the issues and avoid termination. If such consultation fails, the termination will go into effect at the end of the 60-day period, unless all the Signatories agree to a longer period.
- B. In the event of termination, the BLM shall refer to the Wyoming State Protocol to address any remaining adverse effects to historic properties treated under this agreement.

VIII. Sunset Terms

- A. This PA will remain in effect for 5 years.
- B. The BLM will ensure the PA will be reevaluated every year by all Signatories, or until the Agreement has been terminated or fully complied with.

General Provisions

- A. **Entirety of Agreement.** This PA, consisting of fourteen pages including appendices A through G represents the entire and integrated agreement between the parties and supersedes all prior negotiations, representations and agreements, whether written or oral.
- B. **Prior Approval**. This PA shall not be binding upon any party unless this PA has been reduced to writing and signed by all Signatories before performance begins as described under the terms of this PA.

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C. Severability. Should any portion of this PA be judicially determined to be illegal or unenforceable, the remainder of the PA shall continue in full force and effect, and any party may renegotiate the terms affected by the severance.

Execution of this Memorandum of Agreement and implementation of its terms is evidence that the BLM has taken into account the effects of future federal minerals related development on the setting of the Pumpkin Buttes TCP...

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Signatures. In witness whereof, the parties to this PA through their duly authorized representatives have executed this PA on the days and dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this PA as set forth herein.

The effective date of this PA is the date of the last signature affixed to this page.

SIGNATORIES

Bureau of Land Management, Buffalo, Wyoming Field Office	
	Date
Chris Hanson, Field Manager	
Bureau of Land Management, Wyoming State Office	
Bill Hill, Deputy State Director, Resource Policy and Management	Date
Wyoming State Historic Preservation Office	
Mary Hopkins, Interim State Historic Preservation Officer	Date
Wyoming Attorney General's Office	
	Date
Donald Gerstein, Senior Assistant Attorney General	

APPENDIX A SITE SPECIFIC MITIGATION MEASURES TO ADDRESS SURFACE RECLAMATION

- A. The operator will follow the guidance provided in the Wyoming Policy on Reclamation (IM WY-90-231) specifically the following:
 - 1. The reclaimed area shall be stable and exhibit none of the following characteristics:
 - a. Large rills or gullies.
 - b. Perceptible soil movement or head cutting in drainages.
 - c. Slope instability on, or adjacent to, the reclaimed area in question.
 - 2. The soil surface must be stable and have adequate surface roughness to reduce runoff and capture rainfall and snow melt. Additional short-term measures, such as the application of mulch, shall be used to reduce surface soil movement.
 - 3. Vegetation canopy cover (on unforested sites), production and species diversity (including shrubs) shall approximate the surrounding undisturbed area. The vegetation shall stabilize the site and support the planned post disturbance land use, provide for natural plant community succession and development, and be capable of renewing itself. This shall be demonstrated by:
 - a. Successful onsite establishment of species included in the planting mixture or other desirable species.
 - b. Evidence of vegetation reproduction, either spreading by rhizomatous species or seed production.
 - 4. The reclaimed landscape shall have characteristics that approximate the visual quality of the adjacent area with regard to location, scale, shape, color and orientation of major landscape features.
- B. All disturbed lands associated with this project, including the pipelines, access roads, water management facilities, etc. will be expediently reclaimed and reseeded in accordance with the surface use plan and any pertinent site-specific Conditions of Approval (COAs).

Areas not needed for production operations will be reshaped to approximate original contour of adjacent undisturbed surface. Topsoil will be spread evenly over reclaimed areas and drill seeded.

Disturbed areas will be drill seeded on the contour to a depth of 0.5 inch, followed by cultipaction to compact the seed preventing soil and seed losses. To maintain quality and purity, the current year's tested, certified seed with a minimum germination rate of 80% and a minimum purity of 90% will be used.

Slopes too steep for machinery may be hand broadcast and raked with twice the specified amount of seed. Fall seeding will occur after September 15 and prior to prolonged ground frost. To be effective, spring seeding will occur after the frost has left the ground and prior to May 15, unless prohibited by other stipulations preventing operations during these times, such as stipulations to protect wildlife habitat.

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Areas with high erosion potential will have special measures applied, as necessary, to ensure successful reclamation takes place. This may include the installation of erosion fabric/matting, hydro seeding, water barring, mulching or other measures required by the BLM.

All topsoil material to be stockpiled for ten (10) months or longer will be windrowed, signed and stabilized with vegetation.

During reclamation, the fill material will be pushed back into the cuts and up over the back slope. No depressions will be left to trap water or form ponds. Topsoil will be distributed evenly over the entire area, and the seedbed will be prepared by disking to a depth of four to six inches. No reclamation work will be completed when soils are frozen or overly wet.

Site-specific, phased, final reclamation plans will be submitted to BLM for approval for all of the facilities associated with this POD, including water management control structures, at the time of their abandonment. These plans will be formulated and submitted to BLM for approval via individual Notice of Intent (NOI) Sundry Notice, as each facility is no longer needed for operational purposes. Reservoirs, land application areas, and off-channel pits will have soil testing completed to determine site-specific need for soil amendments or other treatments in order to ensure long-term reclamation success.

APPENDIX B SITE SPECIFIC MITIGATION MEASURES TO ADDRESS ACCESS ROADS

Wherever possible, existing roads will be utilized. Two types of roads may be constructed for energy related projects within 2 miles of the Pumpkin Buttes:

- a. BLM temporary roads defined as two-track roads with minor upgrades (including installation of underground utilities associated with production), and
- b. BLM resource roads which are surfaced and provide all-season access (including the installation of underground utilities associated with production).

In general, temporary roads will be single-lane roads with minimal disturbance. They are intended for dry weather use and will be returned to a near natural condition upon completion of use. The running surface for temporary roads will not exceed 12 feet. Total width of disturbance for temporary roads including utility lines (see Appendix C) will be limited to 20 feet in level areas and 32 feet in areas with side slopes.

The running surface of BLM resource roads will not exceed 16 feet. The gravel surface of resource roads must be a color that does not create a visual contrast with the surrounding topography. The width of total disturbance for resource roads will not exceed 40 feet (including buried utility lines) unless specific road designs indicate otherwise and the wider disturbance area does not create more than a moderate visual contrast.

In order to minimize visual contrast, pipelines are to be corridored immediately next to or within roads (see Appendix C). Where possible, roads will be placed outside areas containing dense patches of sagebrush to avoid visual contrast. All roads should follow natural contours, rather than creating straight lines.

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APPENDIX C SITE SPECIFIC MITIGATION MEASURES TO ADDRESS GATHERING PIPELINES

Within two miles of the Pumpkin Buttes, all energy projects with associated gathering pipelines will be corridored next to or within roads, wherever possible. Existing disturbance should be used for pipeline corridors where possible.

To install utilities, trenching must be performed and thus the topsoil will be disturbed at each location. The typical width of disturbance on level ground is 20 feet, and on side slopes, 32 feet, for temporary roads. These disturbance areas are dual purpose, allowing the installation of roads and construction of pipelines. Operators may perform the initial grading for the pipeline prior to drill rig access and subsequently install the pipeline on a site-specific basis.

Figure 1 demonstrates the typical pipeline installation process on level ground. Topsoil from a typical width of 20 feet is salvaged and placed on the non-working side of the corridor for later reclamation. A trench is then excavated and spoil is placed on the non-working side but segregated from the topsoil. On the working side of the corridor, pipe fusion activities, equipment travel, and utility installation occurs on the undisturbed ground as long as the remaining topsoil is undamaged. There will be instances on the working side where small areas of ruts or uneven ground will be groomed to facilitate the safe passage of equipment. After the utilities are installed, spoil is placed back into the trench and the topsoil is redistributed over the disturbed corridor before reseeding.

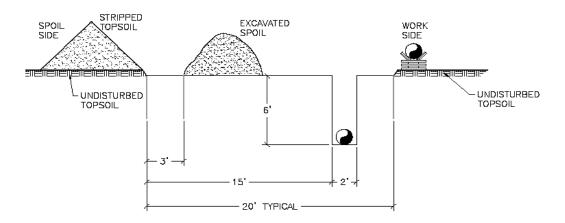


Figure 1: Typical Pipeline Construction for Level Ground

In order to safely operate trenching equipment, the ground should be level. Figure 2 demonstrates the typical pipeline installation process in a side hill situation. Topsoil from a typical width of 32 feet is salvaged and placed on the non-working side of the corridor for later reclamation. Before trenching, a level travel way is cut into the side slope – balancing the cut to the downhill fill. Spoil is again placed on the non-working side with the topsoil and work activities occurring on the opposite side of the corridor on the

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leveled surface. When work is completed, the trench is filled and the ground is contoured back as close to original as possible before topsoil is redistributed and the ground is reseeded.

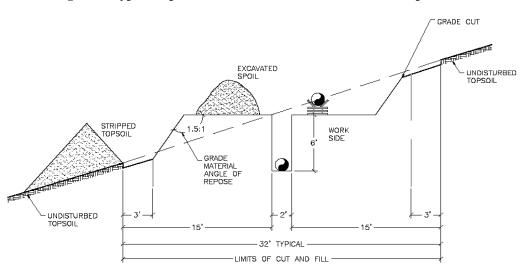


Figure 2: Typical Pipeline Construction for Areas with Side Slopes

To minimize the surface disturbance, only equipment that is appropriate to the scope and scale of the work will be used. Access to construction work will be suspended when excessive rutting or resource damage will occur. Soil and overburden will not be pushed over side slopes or into drainages. All soil material disturbed will be placed in an area where it can be retrieved and where the material does not impede watershed and drainage flows.

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APPENDIX D SITE SPECIFIC MITIGATION MEASURES TO ADDRESS WELL LOCATIONS

- A. Coalbed Methane Well Locations: Within two miles of the base of the Pumpkin Buttes, no well pads will be constructed for coalbed methane wells, unless there are no other feasible locations. Wherever possible, areas of existing disturbance will be used. In order to minimize visual contrast, coalbed methane wells will not be placed in areas of dense sage brush or other vegetation unless absolutely necessary. Brush hogging or other vegetation removal on drilling locations within areas of dense sage brush or other vegetation will be feathered to reduce visual contrast and limited to a maximum of 125 feet in diameter. All above ground infrastructure related to well production (frost box, meter, fencing, etc.) will be painted in a color that best blends in with the surrounding topography. These colors are typically Covert Green (PANTONE for Architecture Color Guide 18-0617 TPX) or Carlsbad Canyon (Munsell Soil Color 2.5Y 6/2). It may be determined that different colors are required on a site specific determination based on a visual assessment. Additional concealment measures such as the creation of earth berms or placement of vegetation may be required to screen well locations.
- B. Conventional Oil and Gas Well Locations: Within two miles of the base of the Pumpkin Buttes for conventional oil or gas wells, wherever possible, areas of existing disturbance should be used. In order to minimize visual contrast, well locations will not be placed in areas of dense sage brush or other vegetation unless absolutely necessary. Brush hogging or other vegetation removal on drilling locations within areas of dense sage brush or other vegetation will be feathered to reduce visual contrast and limited to a maximum of 50 feet from the edge of the constructed pad. All above ground infrastructure related to well production will be painted in a color that best blends in with the surrounding topography. These colors are typically Covert Green (PANTONE for Architecture Color Guide 18-0617 TPX) or Carlsbad Canyon (Munsell Soil Color 2.5Y 6/2). It may be determined that different colors are required on a site specific determination based on a visual assessment. All gravel surfacing on pad locations must be a color that does not create a visual contrast with the surrounding topography. Additional concealment measures such as the creation of earth berms or placement of vegetation may be required to screen well locations.
- C. *In-Situ* Uranium Well Locations: Within two miles of the base of the Pumpkin Buttes for *in-situ* uranium mines, wherever possible, areas of existing disturbance should be used. In order to minimize visual contrast, wells locations will not be placed in areas of dense sage brush or other vegetation unless absolutely necessary. Brush hogging or other vegetation removal on drilling locations within areas of dense sage brush or other vegetation will be feathered to reduce visual contrast and limited to a maximum of 30 feet in diameter. All above ground infrastructure related to well production will be painted in a color that best blends in with the surrounding topography. These colors are typically Covert Green (PANTONE for Architecture Color Guide 18-0617 TPX) or Carlsbad Canyon (Munsell Soil Color 2.5Y 6/2). It may be determined that different colors are required on a site specific determination based on a visual assessment.

APPENDIX E SITE SPECIFIC MITIGATION MEASURES TO ADDRESS PROPOSED POWER LINES

A. Within one mile of the base of the Pumpkin Buttes, power lines servicing wells will be buried. Wherever possible, areas of existing disturbance should be used. Buried power lines will be placed inside, or within 5 feet of, the trench utilized for pipelines when possible. Construction of overhead power lines between one mile and two miles from the base of the Pumpkin Buttes will be designed to reduce visual contrast.

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APPENDIX F SITE SPECIFIC MITIGATION MEASURES TO ADDRESS WATER DISCHARGE

Reservoirs within two miles of the base of the Pumpkin Buttes can create a strong visual contrast. A visual analysis (completion of a visual contrast rating form) will be performed for each planned reservoir within two miles of the Pumpkin Buttes to determine the degree of visual contrast. If a reservoir creates a strong visual contrast, it will either not be permitted, or will be modified or relocated so it creates a moderate visual contrast or less.

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APPENDIX G SITE SPECIFIC MITIGATION MEASURES TO ADDRESS OTHER FACILITIES

All permanent above-ground structures (e.g., production equipment, tanks, etc.) not subject to safety requirements will be painted to blend with the natural color of the landscape. The color will simulate the standard environmental colors established by the BLM for visual resource management. These colors are typically Covert Green (PANTONE for Architecture Color Guide 18-0617 TPX) or Carlsbad Canyon (Munsell Soil Color 2.5Y 6/2). It may be determined that different colors are required on a site specific determination based on a visual assessment.

Gravel: All gravel surfaces associated with any part of a project within two miles of the base of the Pumpkin Buttes must be a color that does not create a visual contrast with the surrounding topography.

Staging areas: The removal of large areas vegetation can create a strong visual contrast. Unless a staging area can be placed completely in existing disturbance or in grassy area that does not contain dense sage or other vegetation, it will not be permitted within two miles of the base of the Pumpkin Buttes.

Compressors: Since they can create can create a strong visual contrast and create auditory distractions, compressors will not be approved within two miles of the base of the Pumpkin Buttes.

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